

REPORT
OF THE
DEPARTMENT OF SANITATION
OF THE
ISTHMIAN CANAL COMMISSION
FOR THE
YEAR 1913

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LETTER OF TRANSMITTAL.

ISTHMIAN CANAL COMMISSION,
DEPARTMENT OF SANITATION,
Ancon, Canal Zone, January 24, 1914.

To the CHAIRMAN AND CHIEF ENGINEER,
Isthmian Canal Commission, Culebra, Canal Zone.

SIR: I have the honor to submit the following report of the department of sanitation for the calendar year 1913.

Statistics as to the death rate among employees of the Isthmian Canal Commission and Panama Railroad Co. for the calendar year just closed, compared with similar figures for the previous years since 1904, are as follows:

	Number of employees.	Deaths.	Rate per 1,000.
1904.....	6,213	82	13.26
1905.....	16,512	427	25.86
1906.....	26,547	1,105	41.73
1907.....	39,238	1,131	28.74
1908.....	43,891	571	13.01
1909.....	47,167	502	10.64
1910.....	50,802	558	10.98
1911.....	48,876	539	11.02
1912.....	50,893	467	9.18
1913.....	56,654	473	8.35

The death rate among our white employees from the United States from disease was 2.50 per thousand, while the total death rate for the year for this class of employees was 5 as against 5.52 per thousand in 1912. If we include American women and children, it will raise the death rate of Americans from disease to 3.40. Including in the above figures the officers and men of the United States Army and Marine Corps stationed on the Canal Zone and their families, the death rate from disease is lowered to 3.16 per thousand. The death rate from disease in our Army for the calendar year 1912 was 2.37 per thousand.

Taking special diseases, the deaths among our employees have been—

	1905	1906	1907	1908	1909	1910	1911	1912	1913
Typhoid fever.....	12	42	98	19	13	13	10	4	4
Dysentery.....	14	69	48	16	8	21	13	8	6
Pneumonia.....	93	413	328	93	70	73	94	57	47
Malaria.....	86	233	154	73	52	50	47	20	21

Among our 11,943 white employees there were no deaths during the year from either dysentery or typhoid fever.

The improved conditions as regards deaths from malaria among our employees continues, and the same is true of the admission rate to hospitals, as is shown by the following table:

Per 1,000.

1904.....	125
1905.....	514
1906.....	821
1907.....	424
1908.....	282
1909.....	215
1910.....	187
1911.....	184
1912.....	110
1913.....	76

Deaths among our employees from the other principal diseases were as follows: Abscess of liver, 4; organic disease of heart, 24; all forms of tuberculosis, 65; nephritis, acute and chronic, 26; leaving 100 deaths among employees from all other diseases and 176 deaths from external violence.

Considering the death rate of the total population, including the cities of Panama and Colon and the Canal Zone, we find the rates for the different years to be as follows:

Rate per 1,000.

1905.....	49.94
1906.....	48.37
1907.....	33.63
1908.....	24.83
1909.....	18.19
1910.....	21.18
1911.....	21.46
1912.....	20.49
1913.....	23.57

One case of smallpox on a ship from Callao, Peru, was isolated at Santo Tomas Hospital during the month of November and recovered, being discharged from hospital the following month.

With this exception, no cases of yellow fever, smallpox, or plague originated on or were brought to the Isthmus during the month.

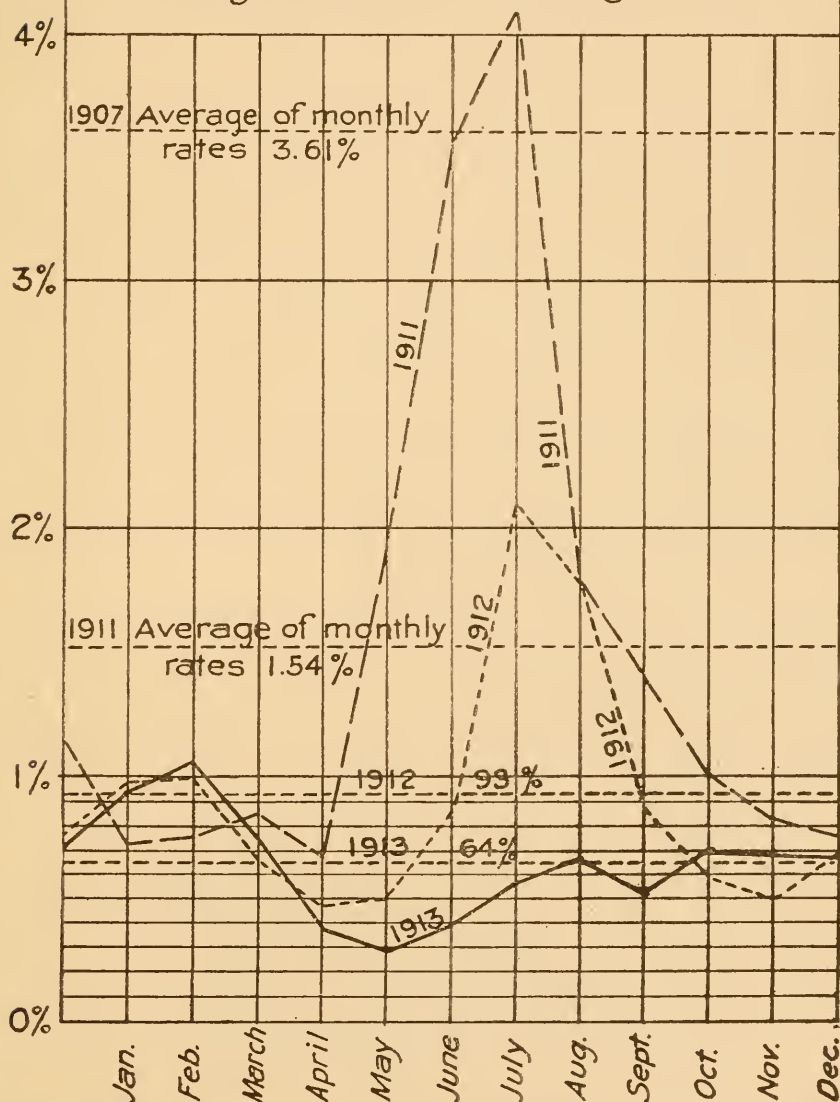
Appended hereto is a chart showing the progress being made in malaria control.

Very respectfully,

JOHN L. PHILLIPS,
Acting Chief Sanitary Officer.

MALARIA CHART FOR 1911, 1912 AND 1913.

Showing the number of malaria cases each month among employees, expressed as a percentage of the entire working force.



Note relation of Dry Season and Wet Season to Malaria in 1913 and previous years.
(Dry Season—January to April, inclusive.)



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ANNUAL REPORT OF THE DEPARTMENT OF SANITATION, ISTHMIAN CANAL COMMISSION,

FOR THE YEAR 1913.

VITAL STATISTICS.

DEATHS OF EMPLOYEES OF THE ISTHMIAN CANAL COMMISSION AND PANAMA RAILROAD CO.

Color.	Average number of em- ployees.	Total number of deaths from—			Annual death rate per 1,000.		
		Dis- ease.	Vio- lence.	All causes.	Dis- ease.	Vio- lence.	All causes.
White.....	11,943	43	38	81	3.60	3.18	6.78
Colored.....	44,711	254	138	392	5.68	3.09	8.77
Total.....	56,654	297	176	473	5.24	3.11	8.35

DEATHS IN THE CITIES OF PANAMA AND COLON AND THE CANAL ZONE.

Place.	Population.	Deaths.	Annual average per 1,000.
Panama.....	47,172	1,507	31.95
Colon.....	20,232	489	24.17
Canal Zone.....	61,700	1,047	16.97
Total.....	129,104	3,043	23.57

NOTE.—The figures relating to the number of employees are compiled from the pay rolls of the different months of the year.

The population and deaths as given for the cities of Panama and Colon and the Canal Zone include employees and civil population.

Total admissions of employees to hospitals and sick camps, including those sick in quarters..... 29,391

Average per thousand of admissions of employees to hospitals and sick camps, including those sick in quarters..... 519

DEATHS BY AGE, COLOR, AND SEX.

Age.	White.			Colored.			Yellow.			Total.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Under 1 year...	54	49	103	529	372	901	1	....	1	584	421	1,005
1 to 4 years.....	18	12	30	116	112	228	2	....	2	136	124	260
5 to 10 years....	3	5	8	20	15	35	....	....	....	23	20	43
11 to 20 years...	9	10	19	61	53	114	....	....	....	70	63	133
21 to 30 years....	49	24	73	380	146	526	12	....	12	441	170	611
31 to 40 years....	60	22	82	219	126	345	7	1	8	286	149	435
41 to 50 years....	34	11	45	145	62	207	8	....	8	187	73	260
51 to 60 years....	19	5	24	62	25	87	6	....	6	87	30	117
61 to 70 years....	8	5	13	41	17	58	3	....	3	52	22	74
71 to 80 years....	1	3	4	8	16	24	2	1	3	11	20	31
81 to 90 years....	5	2	7	4	3	7	....	....	....	9	5	14
Unknown.....	13	....	13	40	7	47	....	....	....	53	7	60
Total.....	273	148	421	1,625	954	2,579	41	2	43	1,939	1,104	3,043

DEATHS BY NATIONALITY.

Nations.	Employees.	Non-employees.	Total.
Africa.....	....	1	1
Antigua.....	10	14	24
Austria.....	1	1	2
Bahama Islands.....	....	2	2
Barbados.....	99	297	396
Belgium.....	....	1	1
Bermuda Islands.....	1	....	1
Bolivia.....	....	1	1
Chile.....	....	3	3
China.....	....	40	40
Colombia.....	14	83	97
Costa Rica.....	1	6	7
Cuba.....	3	3	6
Curaçao.....	....	3	3
Demerara.....	3	7	10
Dominica.....	1	5	6
Ecuador.....	....	9	9
England.....	....	4	4
Fortune Islands.....	3	....	3
France.....	2	8	10
Greece.....	6	7	13
Grenada.....	9	15	24
Guadeloupe.....	8	15	23
Guiana, British.....	2	1	3
Guatemala.....	....	2	2
Haiti.....	2	3	5
India.....	2	1	3
Ireland.....	1	....	1
Italy.....	3	16	19
Jamaica.....	154	498	652
Martinique.....	19	57	76
Mexico.....	....	10	10
Montserrat.....	7	10	17
Nassau.....	2	....	2
Nevis.....	2	2	4
Nicaragua.....	....	3	3

DEATHS BY NATIONALITY—Continued.

Nations.	Employees.	Non-employees.	Total.
Norway.....	1	.....	1
Panama.....	14	1,252	1,266
Peru.....	3	6	9
Porto Rico.....	.....	1	1
Russia.....	.....	1	1
Saba.....	1	.....	1
Salvador.....	.....	1	1
Scotland.....	.....	1	1
St. Kitts.....	4	2	6
St. Lucia.....	8	51	59
St. Thomas.....	.....	2	2
St. Vincent.....	17	4	21
Spain.....	29	32	61
Trinidad.....	4	13	17
Turks Island.....	2	1	3
United States.....	34	46	80
Venezuela.....	1	4	5
West Indies.....	.....	9	9
Unknown.....	.....	16	16
Total.....	473	2,570	3,043

CAUSES OF DEATHS OF EMPLOYEES OF THE ISTHMIAN CANAL COMMISSION AND PANAMA RAILROAD.

Causes of death.	White.	Colored.	Total.
DISEASE.			
Alcoholism, acute and chronic.....	1	.....	1
Aneurism.....	.....	5	5
Apoplexy.....	3	9	12
Appendicitis.....	1	1	2
Arteriosclerosis.....	.....	1	1
Biliary calculi.....	1	.....	1
Brain, softening of.....	1	2	3
Cancer of intestines.....	.....	1	1
Cancer and other malignant tumors of stomach and liver.....	1	2	3
Cancer of organs not specified.....	1	1	2
Cerebrospinal fever.....	1	.....	1
Diabetes.....	1	.....	1
Diarrhea and enteritis.....	.....	1	1
Diphtheria.....	.....	1	1
Dysentery.....	.....	2	2
Bacillary.....	.....	1	1
Unclassified.....	.....	3	3
Empyema.....	1	.....	1
Endocarditis, acute and chronic.....	.....	1	1
Epilepsy.....	.....	1	1
Fever:			
Hemoglobinuric.....	6	.....	6
Malaria.....	.....	2	2
Malaria, estivoautumnal.....	4	8	12
Malaria, tertian.....	.....	1	1
Typhoid.....	.....	4	4
Heart, organic disease of.....	7	17	24
Hernia, intestinal obstruction.....	1	2	3
Indigestion, acute.....	.....	1	1
Infection of unknown origin.....	2	1	3

CAUSES OF DEATHS OF EMPLOYEES OF THE ISTHMIAN CANAL
COMMISSION AND PANAMA RAILROAD—Continued.

Causes of death.	White.	Colored.	Total.
DISEASE—continued.			
Intestines, diseases of.....		2	2
Laryngitis.....		1	1
Larynx, disease of.....		1	1
Liver:			
Abscess of.....	1	3	4
Cirrhosis of.....		1	1
Lungs, gangrene of.....		2	2
Meningitis, simple.....		5	5
Mouth and annexa, diseases of.....		1	1
Nephritis:			
Acute.....		2	2
Chronic.....	1	23	24
Other diseases of the kidneys and annexa.....		1	1
Other diseases of the nervous system.....		1	1
Peritonitis, simple.....		5	5
Phlegmon and cellulitis.....		1	1
Pneumonia.....		2	2
Pneumonia, lobar.....	1	44	45
Pott's disease.....		1	1
Pyemia.....	1	5	6
Pyemia and septicemia, pneumococcic.....		2	2
Pyelo-nephrosis.....		2	2
Senility.....	1	1	2
Septicemia, purulent infection and.....	1	4	5
Spinal cord, disease of.....		1	1
Stomach, disease of.....		1	1
Syphilis.....	2	2	4
Tetanus.....	1	2	3
Tuberculosis:			
Abdominal.....		1	1
Disseminated.....	1	19	20
Miliary.....		8	8
Pulmonary.....		36	36
Ulcer of the stomach.....	1	2	3
Ulcer, duodenal.....		3	3
Urethra, diseases of.....		1	1
VIOLENCE.			
Suicides.....	1		1
Absorption of deleterious gases.....		2	2
Accidental traumatisms, various.....	11	46	57
Burns and scalds.....		3	3
Drowning, accidental.....	6	23	29
Dynamite explosions.....	3	15	18
Electric shock.....		1	1
Homicides.....	1	3	4
Railroad accidents.....	16	38	54
Other external violence.....		7	7
Total.....	81	392	473

DEATHS OF WHITE EMPLOYEES FROM THE UNITED STATES

Name.	Division.	Time on Isthmus.	Age.	Cause of death.
<i>January, 1913.</i>		<i>Years.</i>		
Cunningham, Leslie C.	Mechanical division.	¹ 9	26	Railroad traumatism.
Kallish, B. A.	Panama R. R. Co.	20	53	Softening of brain.
Mohen, Michael J.	McClintic - Marshall Co.	² 10	27	Traumatism by fall.
Wood, Harold.	Atlantic division.	7	22	Traumatism by machines.
<i>February, 1913.</i>				
Catto, John F.	Quartermaster's department.	7	40	Railroad traumatism.
Evans, Charles E.	Fifth division.	² 4	33	Septicemia.
Mulligan, T. J.	McClintic - Marshall Co.	² 3	26	Cerebral syphilis.
Stern, Harry.	Commissary department.		33	Homicide by firearms.
<i>March, 1913.</i>				
Mattimore, H. B.	Mechanical division.		40	Perforated gastric ulcer.
<i>April, 1913.</i>				
Dovers, Hughes.	McClintic - Marshall Co.	² 5	24	Traumatism by fall.
Edwards, Harvey.	do.	² 14	31	Do.
Johnson, Olaf W.	Atlantic division.	4	34	Infection of undetermined origin.
Modin, Harry.	Dredging division.	11	40	Organic disease of heart.
Swinehart, Charles.	Central division.	7	31	Traumatism by land-slides.
Wallace, Ross S.	McClintic - Marshall Co.	11	44	Traumatism by fall.
<i>May, 1913.</i>				
Sinclair, Joseph M.	Sanitary department.	9	32	Organic disease of heart.
<i>June, 1913.</i>				
Allen, W. J.	Atlantic division.	6	52	Cerebral hemorrhage.
Myers, Thomas J.	Fifth division.	⁵ 3	53	Carcinomatosis.
Nicholson, John E.	American Cement Tile Co.	³ 5	22	Malarial fever, estivo-autumnal.
Stevenson, Olaf P.	First division.	² 8	35	Traumatism by machines.
<i>July, 1913.</i>				
Guinther, John H.	Atlantic division.	7	29	Traumatism by machines.
Kitchen, Andrew G.	Dredging division.	5	47	Diabetes.
<i>August, 1913.</i>				
Gartrell, Frank D.	Fifth division.	5	24	Railroad traumatism.
Nylen, Charles A.	Atlantic division.	5	43	Traumatism in mines and quarries.
<i>September, 1913.</i>				
Emmett, Wm. P.	Atlantic division.	³ 4	50	Chronic nephritis.
Hibben, James H.	Sixth division.	3	42	Organic disease of heart.
O'Shaughnessy, Philip.	Central division.	8	39	Railroad traumatism.

¹ Days.² Months.³ Weeks.

DEATHS OF WHITE EMPLOYEES FROM THE UNITED STATES—Con.

Name.	Division.	Time on Isthmus.	Age.	Cause of death.
<i>October, 1913.</i>				
Jackson, Samuel.....	U. S. Steel Products Co.	Years. 1 4	24	Organic disease of heart.
<i>November, 1913.</i>				
Hill, George F.....	Panama R. R. Co.	5	33	Hemoglobinuric fever.
Logan, Orren.....	Transportation Division.	7 1/2	33	Railroad traumatism.
Telfer, William.....	Panama R. R. Co.	8	63	Organic disease of heart.
Wilkins, John M., jr..	Transportation Division.	6	39	Railroad traumatism.

¹ Month.

None in December, 1913.

DEATHS OF WHITE WOMEN AND CHILDREN FROM THE UNITED STATES.

Name.	Time on Isthmus.	Age.	Cause of death.
<i>February, 1913.</i>			
Anderson, Mrs. Norman C....	Years. 3	Years. 26	Eclampsia.
Lampson, Mrs. O. R.....	5	34	Intestinal obstruction.
Wuelper, Josephene.....	6	29	Disseminated tuberculosis.
<i>March, 1913.</i>			
Browning, Mrs. W. S.	6	49	Cerebral apoplexy.
Keenan (infant), No. 1.....	1 47	1 47	Premature birth.
Keenan (infant), No. 2.....	1 49	1 49	Do.
Kerr (infant).....	11	2 11	Do.
<i>May, 1913.</i>			
Grout, Mary A.....	2	64	Cancer of peritoneum, intestines, and rectum.
Hanson, Herbert.....	3	14	Pott's disease.
<i>June, 1913.</i>			
Cameron, Mrs. John.....	3 6	45	Malarial fever, E. A.
Hess (infant).....	1 8	1 8	Premature birth.
Watkins (infant).....	1 2	1 2	Do.
<i>July, 1913.</i>			
Smith (infant).....	2 6	2 6	Premature birth.
<i>September, 1913.</i>			
Hern, Mrs. J. F.....	7	34	Accidents of pregnancy.
Johnson, Mrs. Axel.....	3 9	21	Typhoid fever.

¹ Days.² Hours.³ Months.

DEATHS OF WHITE WOMEN AND CHILDREN FROM THE UNITED STATES—Continued.

Name.	Time on Isthmus.	Age.	Cause of death.
<i>October, 1913.</i>			
	<i>Years.</i>	<i>Years.</i>	
Bernsee, Mrs. F. L.	2	43	Cancer of uterus.
Haywood, Harry K.	18	18	Broncho-pneumonia.
Lenzen, Mary Jane.	2½	5	Other acute poisonings.
Waterworth (infant)	2 1	2 1	Premature birth.
<i>November, 1913.</i>			
Severy, Dorothy	3 9	3 9	Diarrhea and enteritis.
Stawner, Sydney	1 6	1 6	Broncho-pneumonia.
<i>December, 1913.</i>			
Lokerson, Mrs. A. C.	2 1	28	Septicaemia.

¹ Months.² Days.³ Weeks.

No deaths in January, April, and August, 1913.

DEATH RATE AMONG AMERICANS ON THE ISTHMUS.

	Number.	Cause.	Number of deaths.	Annual average per 1,000.
Average number of white employees from the United States. }	6,408	{ Disease.....	16	2.50
		{ Violence.....	16	2.50
		{ All causes.....	32	5.00
Average number of white women and children from the United States. }	4,467	{ Disease.....	21	4.70
		{ Violence.....	1	.22
		{ All causes.....	22	4.92
Average number of white employees and their families from the United States. }	10,875	{ Disease.....	37	3.40
		{ Violence.....	17	1.56
		{ All causes.....	54	4.96
Total number of Americans on the Canal Zone. ¹ }	12,344	{ Disease.....	39	3.16
		{ Violence.....	24	1.94
		{ All causes.....	63	5.10

¹ The figures representing the total number of Americans on the Canal Zone include employees and their families and the officers and men of the U. S. Army and Marines and their families.

CAUSES AND PLACES OF DEATH OF EMPLOYEES AND CIVIL POPULATION.

Diseases.	Ancon Hospi- tal.	Colon Hospi- tal.	Pan- ama.	Colon.	Zone.	Total.
<i>General diseases.</i>						
Typhoid fever.....	8	1	3			12
Paratyphoid fever.....	1					1
Malaria.....		3	25	28	18	74
Malarial fever:						
Estivoautumnal.....	24	7	38		6	75
Tertian.....	1			2		3
Undetermined.....	1					1
Clinical.....			1	1	3	5
Cachexia.....	1		4			5
Hemoglobinuric fever, malarial.....	6				1	7
Scarlet fever.....			3			3
Whooping cough.....			1			1
Diphtheria and croup.....	3	1	6			10
Croup.....			1		1	2
Influenza.....			1			1
Dysentery.....	1		21	1	3	26
Entamebic.....			1			1
Bacillary.....	2					2
Unclassified.....	6					6
Leprosy.....		1			1	2
Erysipelas.....			1			1
Purulent infection and septicemia.....	8		2		1	11
Pyemia.....	11					11
Septicemia.....	5	4	14	1	4	28
Pyemia and septicemia, pneumo- coccic.....	5					6
Tetanus.....	4	2	21		2	29
Pellagra.....	5	4	14			23
Beriberi.....		1	13			14
Tuberculosis of the lungs.....	45	28	163	25	15	276
Acute miliary tuberculosis.....	17	2			5	24
Tuberculous meningitis.....	1		1	1		3
Abdominal tuberculosis.....	2	2	2			6
Pott's disease.....	1				1	2
Tuberculosis of bones and joints.....			1			1
Tuberculosis of the larynx.....			1			1
Disseminated tuberculosis.....	43	2		2	2	49
Rickets.....	1		2			3
Syphilis:						
Tertiary.....	9	1			1	11
Hereditary.....	1	1	8	3	5	18
Period not stated.....		1				1
Gonorrhoea.....			1			1
Gonorrheal arthritis.....	1	2				3
Cancer and other malignant tumors:						
Buccal cavity.....			1	1		2
Stomach and liver.....	7	2	3			12
Peritoneum, intestines, rectum.....		1	1		1	3
Female genital organs.....	1		4	1		6
Breast.....			2	1		3
Other organs and of organs not specified.....	4	1	11			16
Other tumors (tumors of the female genital organs excepted).....					1	1
Acute articular rheumatism.....			2			2
Scurvy.....			1			1
Diabetes.....		1	2			3
Hodgkin's disease.....					1	1

CAUSES AND PLACES OF DEATH OF EMPLOYEES AND CIVIL
POPULATION—Continued.

Diseases.	Ancon Hospi- tal.	Colon Hospi- tal.	Pan- ama.	Colon.	Zone.	Total.
<i>General diseases—Continued.</i>						
Anemia:						
Chlorosis.....			1		1	2
Primary, pernicious.....	2		2	1	1	6
Secondary, cause not determined.....			7		1	8
Other general diseases.....			1			1
Alcoholism:						
Acute or chronic.....	1	1	1			3
Acute.....	1	1	1			3
Chronic.....	1	1	2	1		5
Alcoholic psychosis.....	1		1			2
Drug habit.....		1			1	2
<i>Diseases of the nervous system and of the organs of special sense.</i>						
Encephalitis.....	1	1	1			3
Simple meningitis.....	8	4	18		2	32
Cerebrospinal fever.....	1	2	2	1		6
Locomotor ataxia.....			1			1
Other diseases of the spinal cord.....		1				1
Cerebral hemorrhage, apoplexy.....	6	6	23	13	8	56
Softening of the brain.....	3	2				5
Paralysis without specified cause.....		1	4			5
General paralysis of the insane.....	4					4
Other forms of mental alienation.....	4					4
Epilepsy.....	1		3			4
Convulsions:						
Nonpuerperal, 5 years and over.....			1		2	3
Infants, under 5 years of age.....			7	8	14	29
Neuritis.....			1			1
Other disease of the nervous system.....	2					2
Tumor of the brain.....	1		1			2
Neurasthenia.....				1	1	2
Diseases of the eyes and their annexa.....				1		1
Diseases of the ears.....			1			1
<i>Diseases of the circulatory system.</i>						
Acute endocarditis.....	2	1	17	2	2	24
Malignant endocarditis.....		1				1
Organic diseases of the heart.....	33	12	27	8	24	104
Angina pectoris.....			4	1	1	6
Diseases of the arteries, atheroma, aneurysm, etc.....			1	1		2
Aneurysm.....	8		4		3	15
Arteriosclerosis.....	6		7	1		14
Embolism and thrombosis.....	1		2	1		4
Diseases of the lymphatic system (lym- phangitis, etc.).....			1			1
Lymphadenitis (nonvenereal).....			1			1
Hemorrhage; other diseases of the cir- culatory system.....		1	4	1		6
<i>Diseases of the respiratory system.</i>						
Diseases of the larynx.....	1	1			2	4
Laryngitis.....			1		2	3
Acute bronchitis.....			47	22	5	74
Chronic bronchitis.....			4	3	2	9
Broncho-pneumonia.....	10	12	26	23	39	110

CAUSES AND PLACES OF DEATH OF EMPLOYEES AND CIVIL
POPULATION—Continued.

Diseases.	Ancon Hospi- tal.	Colon Hospi- tal.	Pan- ama.	Colon.	Zone.	Total.
<i>Diseases of the respiratory system—Con.</i>						
Pneumonia (unqualified).....			62	6	11	79
Lobar pneumonia.....	47	14	9	1	12	83
Pleurisy.....			5	2		7
Empyema.....	2		5			7
Pulmonary congestion, pulmonary apoplexy.....			9		1	10
Gangrene of the lungs.....	6					6
Other diseases of the respiratory sys- tem (tuberculosis excepted).....	2		1			3
Abscess of lungs.....				1		1
<i>Diseases of the digestive system.</i>						
Diseases of the mouth and annexe.....	3					3
Diseases of the teeth and gums.....			1			1
Stomatitis.....					2	2
Stricture of the œsophagus.....			1			1
Ulcer of the stomach.....	1	1			1	3
Other diseases of the stomach (cancer excepted).....		1	2			3
Acute gastritis.....			1	8	5	14
Acute indigestion.....		1		1	3	5
Diarrhea and enteritis (under 2 years)...	19	3	194	26	54	296
Colitis (under 2 years).....	7	2	18	1	9	37
Diarrhea and enteritis (2 years and over).....	4		9	4	3	20
Colitis (2 years and over).....			5		3	8
Ankylostomiasis.....	2	1			3	6
Intestinal parasites.....			2	1		3
Ascariasis.....					1	1
Appendicitis and typhlitis.....	4				1	5
Acute appendicitis.....			3			3
Hernia, intestinal obstructions.....	2		2		1	5
Other hernias.....	1					1
Intestinal obstruction.....	2	1	6	1	2	12
Other diseases of the intestines.....	3	1	2	1		7
Duodenal ulcer.....	2			1	1	4
Cirrhosis of the liver.....	2		12	1	2	17
Biliary calculi.....	1			1		2
Other diseases of the liver.....	1		4	1		6
Abscess of liver (unqualified).....	1	1	2			4
Abscess of the liver entamœbic.....	7					7
Cholecystitis.....				1		1
Simple peritonitis (nonpuerperal).....		6	8		3	17
Other diseases of the digestive system (cancer and tuberculosis excepted).....					2	2
<i>Nonvenereal diseases of the genito- urinary system and annexe.</i>						
Acute nephritis.....	1	2	45	5	8	61
Bright's disease (chronic nephritis)...	29	15	58	15	10	127
Other diseases of the kidney and an- nexa.....	4				1	5
Pyelo-nephrosis.....	3	1			2	6
Cystitis.....		1	1			2
Diseases of the urethra, urinary ab- scess, etc.....	2		2			4
Vesico-vaginal fistula.....			1			1
Diseases of the prostate.....			1			1

CAUSES AND PLACES OF DEATH OF EMPLOYEES AND CIVIL
POPULATION—Continued.

Diseases.	Ancon Hospi- tal.	Colon Hospi- tal.	Pan- ama.	Colon.	Zone.	Total.
<i>Nonvenereal diseases of the genito- urinary system and annexa—Contd.</i>						
Chronic prostatitis.....	.....	.....	1	.....	.....	1
Uterine tumor (noncancerous).....	.....	.....	2	1	.....	3
Other diseases of the uterus.....	.....	.....	1	.....	.....	1
Cysts and other tumors of the ovary.....	.....	.....	1	.....	.....	1
Salpingitis and other diseases of the female genital organs.....	.....	.....	3	.....	.....	3
<i>The puerperal state.</i>						
Accidents of pregnancy.....	1	.....	.....	.....	1	2
Extra-uterine pregnancy.....	.....	1	.....	.....	.....	1
Hyperemesis gravidarum.....	.....	.....	.....	1	.....	1
Puerperal hemorrhage.....	2	1	1	1	.....	5
Puerperal septicemia.....	2	2	5	1	1	11
Puerperal albuminuria and convulsions.....	.....	.....	.....	1	.....	1
Eclampsia.....	2	4	3	3	6	18
Puerperal phlegmasia alba dolens, em- bolus, sudden death.....	.....	.....	1	.....	.....	1
Following childbirth (not otherwise defined).....	.....	1	1	.....	2	4
<i>Diseases of the skin and of the cellular tissue.</i>						
Gangrene.....	1	.....	6	.....	.....	7
Carbuncle.....	.....	1	.....	.....	.....	1
Acute abscess.....	.....	.....	1	.....	.....	1
Phlegmon and cellulitis.....	1	.....	.....	1	.....	2
Other diseases of the skin and annexa.....	.....	.....	1	.....	.....	1
<i>Diseases of the bones and of the organs of locomotion.</i>						
Diseases of the bones (tuberculosis ex- cepted).....	.....	.....	1	.....	.....	1
Caries (nontuberculous).....	.....	.....	1	.....	.....	1
<i>Malformations.</i>						
Congenital malformations (stillbirths not included).....	1	.....	1	1	1	4
<i>Diseases of early infancy.</i>						
Newborn child.....	.....	.....	.....	.....	5	5
Congenital debility, icterus, and scler- ema.....	5	.....	1	7	12	25
Premature birth.....	5	6	15	9	17	52
Congenital debility.....	5	2	18	28	14	67
Malnutrition.....	7	6	41	14	105	173
Other causes peculiar to early infancy (including various consequences of labor).....	1	.....	20	6	8	35
Lack of care.....	.....	.....	1	1	1	3
<i>Old age.</i>						
Senility.....	3	.....	2	1	5	11

CAUSES AND PLACES OF DEATH OF EMPLOYEES AND CIVIL
POPULATION—Continued.

Diseases.	Ancon Hospi- tal.	Colon Hospi- tal.	Pan- ama.	Colon.	Zone.	Total.
<i>Affections produced by external causes.</i>						
Suicide:						
Poisoning.....	1		4			5
Hanging or strangulation.....					2	2
Firearms.....		1	6	1	2	10
Cutting or piercing instruments.....				1		1
Other acute poisonings.....	1					1
Burns (conflagration excepted).....	7		2		2	11
Absorption of deleterious gases (conflagration excepted).....	1				2	3
Accidental drowning.....			5	4	40	49
Traumatism:						
Firearms.....	1				1	2
Cutting or piercing instruments.....					1	1
Fall.....	13	3	1	1	18	36
Mines and quarries.....					11	11
Machines.....	5	1			6	12
Other crushings (vehicles, railroads, landslides, etc.).....	4	1	3		4	12
Railroad traumatism.....	17	2		1	44	64
Dynamite traumatism.....	1				8	9
Traumatism by landslides.....					6	6
Injuries by animals.....	1					1
Electricity (lightning excepted).....					1	1
Homicide by firearms.....		1	7	2		10
Homicide by cutting or piercing instruments.....	2		1	1	1	5
Homicide by other means.....					1	1
Fractures (cause not specified).....			4			4
Other external violence.....	2	2			5	9
<i>Ill-defined diseases.</i>						
Ill-defined organic disease.....					1	1
Sudden death.....			3			3
Cause of death not specified or ill-defined.....	6		13		8	27
Infections of undetermined origin.....	7	1	5		3	16
Total.....	586	204	1,263	321	669	3,043
Stillbirths.....	4	15	158	53	93	323
Grand total.....	590	219	1,421	374	762	3,366

NOTE.—The deaths occurring in Ancon and Colon hospitals resulting from illness, injury, or other causes admitted from the cities of Panama and Colon, or from the Canal Zone, are in the table of vital statistics, credited to the places from whence they were admitted.

TABLE SHOWING DISCHARGES AND DEATHS OF EMPLOYEES IN THE HOSPITALS OF THE ISTHMIAN CANAL COMMISSION, FROM ALL CAUSES, FOR THE YEAR 1913.

Diseases.	Dis- charged.	Died.
<i>General diseases.</i>		
Typhoid fever.....	34	4
Relapsing fever.....	2	..
Malaria fever:		
Estivoautumnal.....	2,531	12
Tertian.....	603	..
Quartan.....	47	..
Mixed.....	5	..
Undetermined.....	10	..
Clinical.....	994	..
Cachexia.....	63	..
Hemoglobinuric fever, malarial.....	14	5
Vaccinia.....	12	..
Measles.....	22	..
Scarlet fever.....	7	..
Diphtheria and croup.....	8	1
Influenza.....	347	..
Dysentery.....	5	..
Entamebic.....	21	1
Bacillary.....	3	1
Unclassified.....	83	3
Leprosy.....	4	..
Erysipelas.....	15	..
Dengue.....	6	..
Chicken pox.....	10	..
Mumps.....	1	..
Hemoglobinuric fever, unqualified.....	3	..
Yaws.....	5	..
Filariasis.....	11	..
Purulent infection and septicemia.....	33	3
Pyemia.....	..	3
Septicemia.....	..	4
Pyemia and septicemia, pneumococcic.....	..	2
Tetanus.....	..	3
Actinomycosis.....	1	..
Pellagra.....	5	..
Tuberculosis of the lungs.....	129	32
Acute miliary tuberculosis.....	..	7
Tuberculous meningitis.....	..	1
Abdominal tuberculosis.....	..	1
Pott's disease.....	6	1
Tuberculosis:		
Bones and joints.....	12	..
The skin.....	1	..
The lymph glands.....	10	..
The genito-urinary organs.....	2	..
Disseminated tuberculosis.....	1	20
Syphilis:		
Primary.....	11	..
Secondary.....	133	..
Tertiary.....	206	2
Period not stated.....	117	1
Gonococcus infection.....	51	..
Gonorrhea.....	394	..
Gonorrheal arthritis.....	48	..
Gonorrheal bubo.....	40	..
Gonorrheal orchitis and epididymitis.....	95	..
Gonorrheal ophthalmia.....	7	..
Soft chancre.....	453	..
Adenitis chancroidal.....	92	..

TABLE SHOWING DISCHARGES AND DEATHS OF EMPLOYEES IN THE HOSPITALS OF THE ISTHMIAN CANAL COMMISSION, FROM ALL CAUSES, FOR THE YEAR 1913—Continued.

Diseases.	Dis- charged.	Died.
<i>General diseases—Continued.</i>		
Cancer and other malignant tumors:		
Stomach and liver.....	3	3
Peritoneum intestines, rectum.....	5	1
Female genital organs.....	1	.....
Breast.....	2	.....
Skin.....	4	.....
Other organs and of organs not specified.....	4	1
Other tumors (tumors of the female genital organs excepted).....	40	.....
Acute articular rheumatism.....	17	.....
Chronic rheumatism and gout.....	3	.....
Gout.....	1	.....
Arthritis deformans.....	1	.....
Diabetes.....	2	1
Anemia, primary, pernicious.....	1	.....
Anemia, secondary, cause not determined.....	24	.....
Other general diseases.....	8	.....
Alcoholism:		
Acute or chronic.....	15	.....
Acute.....	66	.....
Chronic.....	18	.....
Alcoholic psychosis.....	9	1
Chronic lead poisoning.....	2	.....
Other chronic poisonings.....	1	.....
<i>Diseases of the nervous system and of the organs of special sense.</i>		
Simple meningitis.....	.....	5
Locomotor ataxia.....	1	.....
Other diseases of the spinal cord.....	2	1
Cerebral hemorrhage, apoplexy.....	3	9
Softening of the brain.....	.....	2
Paralysis without specified cause.....	11	.....
Other forms of mental alienation.....	33	.....
Dementia precox.....	9	.....
Epilepsy.....	22	.....
Hysteria.....	9	.....
Neuralgia.....	24	.....
Neuritis.....	85	.....
Other diseases of the nervous system.....	21	.....
Neurasthenia.....	178	.....
Diseases of the eyes and their annexa.....	430	.....
Follicular conjunctivitis.....	77	.....
Trachoma.....	5	.....
Diseases of the ears.....	177	.....
<i>Diseases of the circulatory system.</i>		
Pericarditis.....	3	.....
Acute endocarditis.....	3	.....
Malignant endocarditis.....	.....	1
Organic diseases of the heart.....	77	18
Aneurism.....	3	3
Arteriosclerosis.....	7	1
Diseases of the veins (varices, hemorrhoids, phlebitis, etc.).....	18	.....
Hemorrhoids.....	139	.....
Varices.....	8	.....
Varicocele.....	46	.....
Phlebitis.....	5	.....
Diseases of the lymphatic system (lymphangitis, etc.).....	45	.....
Lymphadenitis (nonvenereal).....	181	.....
Hemorrhage; other diseases of the circulatory system.....	8	.....

TABLE SHOWING DISCHARGES AND DEATHS OF EMPLOYEES IN THE HOSPITALS OF THE ISTHMIAN CANAL COMMISSION, FROM ALL CAUSES, FOR THE YEAR 1913—Continued.

Diseases.	Dis- charged.	Died.
<i>Diseases of the respiratory system.</i>		
Diseases of the nasal fossæ	389	.....
Adenoid vegetations.....	4	.....
Myiasis of nasal fossæ and sinuses.....	34	.....
Diseases of the larynx.....	.....	1
Laryngitis.....	10	.....
Diseases of the thyroid body.....	24	.....
Acute bronchitis.....	295	.....
Chronic bronchitis.....	54	.....
Bronchopneumonia.....	13	.....
Pneumonia (unqualified).....	1	.....
Lobar pneumonia.....	187	41
Pleurisy.....	229	.....
Empyema.....	5	1
Pulmonary congestion, pulmonary apoplexy.....	1	.....
Gangrene of the lungs.....	7	2
Asthma.....	44	.....
Pulmonary emphysema.....	11	.....
Other diseases of the respiratory system (tuberculosis excepted)...	2	2
Abscess of lungs.....	3	1
Hay fever.....	2	.....
<i>Diseases of the digestive system.</i>		
Diseases of the mouth and annexa.....	37	1
Diseases of the teeth and gums.....	19	.....
Stomatitis.....	1	.....
Diseases of the pharynx.....	265	.....
Pharyngitis.....	58	.....
Follicular tonsillitis.....	150	.....
Ulcer of the stomach.....	21	2
Other diseases of the stomach (cancer excepted).....	120	1
Acute gastritis.....	38	.....
Chronic gastritis.....	71	.....
Acute indigestion.....	84	.....
Diarrhea and enteritis (2 years and over).....	137	1
Colitis.....	14	.....
Ankylostomiasis.....	65	.....
Intestinal parasites.....	1	.....
Taemiasis.....	4	.....
Appendicitis and typhlitis.....	48	2
Acute appendicitis.....	94	.....
Chronic appendicitis.....	90	.....
Hernia, intestinal obstructions.....	10	2
Inguinal hernia.....	275	.....
Other hernias.....	22	.....
Other diseases of the intestines.....	50	2
Constipation.....	144	.....
Duodenal ulcer.....	7	2
Cirrhosis of the liver.....	14	.....
Biliary calculi.....	13	1
Other diseases of the liver.....	23	.....
Abscess of liver (unqualified).....	8	.....
Abscess of the liver entamebic.....	2	4
Cholecystitis.....	11	.....
Diseases of the spleen.....	2	1
Abscess of spleen.....	2	.....
Simple peritonitis (nonpuerperal).....	13	7
Other diseases of the digestive system (cancer and tuberculosis excepted).....	1	.....

TABLE SHOWING DISCHARGES AND DEATHS OF EMPLOYEES IN THE HOSPITALS OF THE ISTHMIAN CANAL COMMISSION, FROM ALL CAUSES, FOR THE YEAR 1913—Continued.

Diseases.	Discharged.	Died.
<i>Nonvenereal diseases of the genito-urinary system and annexa.</i>		
Acute nephritis.....	20	1
Bright's diseases (chronic nephritis).....	76	21
Other diseases of the kidney and annexa.....	33	1
Pyelonephrosis.....	9	.....
Calculi of the urinary passages.....	18	.....
Diseases of the bladder.....	1	.....
Cystitis.....	29	.....
Diseases of the urethra, urinary abscess, etc.....	65	1
Stricture of the urethra, nonvenereal.....	61	.....
Acute prostatitis.....	4	.....
Chronic prostatitis.....	1	.....
Abscess of the prostate.....	.....	2
Nonvenereal diseases of the male genital organs.....	92	.....
Hydrocele.....	81	.....
Uterine hemorrhage (nonpuerperal).....	1	.....
Uterine tumor (noncancerous).....	6	.....
Other diseases of the uterus.....	10	.....
Cysts and other tumors of the ovary.....	1	.....
Salpingitis and other diseases of the female genital organs.....	11	.....
<i>The puerperal state.</i>		
Normal labor.....	2	.....
Accidents of pregnancy.....	1	.....
<i>Diseases of the skin and of the cellular tissue.</i>		
Gangrene.....	1	.....
Furuncle.....	96	.....
Carbuncle.....	23	.....
Acute abscess.....	291	.....
Phlegmon and cellulitis.....	94	1
Trichophytosis.....	3	.....
Scabies.....	7	.....
Chiggers (<i>Pulex penetrans</i>).....	1	.....
Red bug.....	1	.....
Pemphigus contagiosus.....	3	.....
Ground itch.....	2	.....
Elephantiasis.....	1	.....
Dhobie itch.....	56	.....
Ulcer of the skin.....	102	.....
Oriental sore (<i>leishmaniosis</i>).....	7	.....
Tropical ulcer.....	2	.....
Impetigo contagiosa.....	12	.....
Urticaria.....	8	.....
Ingrowing nail.....	26	.....
Other diseases of the skin and annexa.....	143	.....
<i>Diseases of the bones and of the organs of locomotion.</i>		
Diseases of the bones (tuberculosis excepted).....	56	.....
Caries (nontuberculous).....	2	.....
Mastoid abscess.....	1	.....
Osteomyelitis.....	7	.....
Periostitis.....	11	.....
Diseases of the joints (tuberculosis and rheumatism excepted).....	13	.....
Ankylosis.....	1	.....
Arthritis.....	49	.....
Synovitis.....	19	.....
Amputation.....	80	.....
Other diseases of the organs of locomotion.....	175	.....

TABLE SHOWING DISCHARGES AND DEATHS OF EMPLOYEES IN THE HOSPITALS OF THE ISTHMIAN CANAL COMMISSION, FROM ALL CAUSES, FOR THE YEAR 1913—Continued.

Diseases.	Dis- charged.	Died.
<i>Malformations.</i>		
Congenital malformation (stillbirth not included).....	4	.....
<i>Old age.</i>		
Senility.....	.....	2
<i>Affections produced by external causes.</i>		
Poisoning by food.....	46	.....
Other acute poisonings.....	5	.....
Venomous bites and stings.....	1	.....
Snake bites.....	1	.....
Conflagration.....	15	.....
Burns (conflagration excepted).....	168	2
Traumatism:		
Firearms.....	16	1
Cutting or piercing instruments.....	579	1
Fall.....	603	10
In mines and quarries.....	220	.....
Machines.....	263	3
Other crushings (vehicles, railroads, landslides, etc.).....	138	7
Railroad traumatism.....	227	9
Dynamite traumatism.....	56	1
Traumatism by landslides.....	23	1
Injuries by animals.....	9	.....
Starvation.....	2	.....
Heat exhaustion.....	1	.....
Lightning.....	3	.....
Electricity (lightning excepted).....	7	.....
Homicide by other means.....	1	.....
Fractures (cause not specified).....	492	1
Dislocations.....	19	.....
Sprains.....	170	.....
Other internal violence.....	2,795	7
<i>Ill-defined diseases.</i>		
Cause of death or disease not specified or ill defined.....	1	1
Infections of undetermined origin.....	34	2
No disease.....	64	.....
Feigned disease.....	5	.....
Total.....	19,587	304

CONSOLIDATED HOSPITAL REPORT.

Hospitals.	Re- maining Jan. 1.		Admitted.		Died.		Discharged.		Trans- ferred.		Re- maining Dec. 31.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
<i>Ancon Hos- pital.</i>												
Employees.....	211	439	6,553	10,109	30	204	5,338	9,875	1,209	78	187	391
Nonemployees..	89	74	3,310	1,853	55	242	3,047	1,546	165	53	132	86
Insane.....	34	282	37	198	4	51	25	132	3	46	29	251
Total.....	324	795	9,900	12,160	89	497	8,410	11,553	1,377	177	348	728
<i>Colon Hospital.</i>												
Employees.....	111	78	1,914	1,135	10	51	1,626	1,121	383	19	6	22
Nonemployees..	39	78	1,188	1,618	16	127	1,183	1,529	24	36	4	4
Total.....	150	156	3,102	2,753	26	176	2,809	2,650	407	55	10	26
<i>Culebra Hos- pital.</i>												
Nonemployees..	....	3	6	23	....	....	6	17	....	9	....	....
<i>Palo Seco Leper Asylum.</i>												
Employees.....	....	....	1	1	....	....	....	1	1	....	....	....
Nonemployees..	3	45	2	11	....	9	1	5	....	1	4	41
Total.....	3	45	3	12	....	9	1	6	1	1	4	41
<i>Taboga Sanita- rium.</i>												
Employees.....	34	....	1,776	....	....	....	1,767	....	21	....	22	....
Nonemployees..	9	....	1,258	....	....	....	1,257	....	3	....	7	....
Total.....	43	....	3,034	....	....	....	3,024	....	24	....	29	....
GRAND TOTAL.												
Employees.....	356	517	10,244	11,245	40	255	8,731	10,997	1,614	97	215	413
Nonemployees..	140	200	5,764	3,505	71	378	5,494	3,097	192	99	147	131
Insane.....	24	282	37	198	4	51	25	132	3	46	29	251
Total.....	520	999	16,045	14,948	115	684	14,250	14,226	1,809	242	391	795

CONSOLIDATED SICK-CAMP REPORT.

Stations.	Remain- ing Jan. 1.		Admitted.		Died.		Discharged.		Trans- ferred.		Remain- ing Dec. 31.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Culebra.....	2	2	117	186	....	....	87	140	32	48	....	0
Bas Obispo.....	....	....	25	105	....	....	25	92	....	8	....	5
Porto Bello.....	....	3	138	403	2	1	116	371	20	33	....	1
Toro Point.....	....	....	111	123	....	....	40	38	70	85	1	....
Total.....	2	5	391	817	2	1	268	641	122	174	1	6

CONSOLIDATED REPORT OF EMPLOYEES SICK IN QUARTERS.

Stations.	Days excused for quarters.			New patients excused for quarters.		
	White.	Colored.	Total.	White.	Colored.	Total.
Naos Island.....	95	419	514	42	197	239
Ancon.....	1,502	1,474	2,976	611	287	898
Balboa.....	1,025	5	1,030	434	5	439
Corozal.....	953	2	955	535	2	537
Miraflores.....	69	42	111	43	31	74
Pedro Miguel.....	413	42	455	212	7	219
Paraíso.....	360	....	360	150	....	150
Culebra.....	841	924	1,765	342	321	663
Empire.....	2,461	419	2,880	1,134	178	1,312
Las Cascadas.....	437	69	506	219	23	242
Bas Obispo.....	160	172	332	81	75	156
Gorgona.....	2,057	1,776	3,833	875	647	1,522
Frijoles.....	....	21	21	....	10	10
Gatun.....	1,078	569	1,647	589	242	831
Cristobal.....	2,341	819	3,160	1,066	222	1,288
Porto Bello.....	152	....	152	80	....	80
Toro Point.....	51	6	57	38	3	41
Total.....	13,995	6,759	20,754	6,451	2,250	3,701

CONSOLIDATED HOSPITAL, SICK CAMP, AND SICK-IN-QUARTERS REPORT.

	Remain- ing Jan. 1.		Admitted.		Died.		Discharged.		Trans- ferred.		Remain- ing Dec. 31.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Hospitals.....	520	999	16,045	14,948	115	684	14,250	14,226	1,809	242	391	795
Sick camps....	2	5	391	817	2	1	268	641	122	174	1	6
Total...	522	1,004	16,436	15,765	117	685	14,518	14,867	1,931	416	392	801

	White.	Colored.	Total.
Total admissions to hospitals and sick camps.....	16,436	15,765	32,201
Number of employees sick in quarters.....	6,451	2,250	8,701
Total.....	22,887	18,015	40,902
Less number of patients transferred from sick camps to hospitals, and from hospitals to sanitarium, whose admissions are duplicated in above figures..	1,931	416	2,347
Net admissions to hospitals and sick camps, and those sick in quarters.....	20,956	17,599	38,555

CONSOLIDATED DISPENSARY REPORT.

Stations.	Employees.			Nonemployees.			Total.		
	White.	Col- ored.	Total.	White.	Col- ored.	Total.	White.	Col- ored.	Total.
Naos Is- land....	1,787	12,078	13,865	.....	.....	.....	1,787	12,078	13,865
Ancon....	6,957	24,214	31,171	4,276	5,009	9,285	11,233	29,223	40,456
Balboa....	33,494	39,018	72,512	1,500	812	2,312	34,994	39,830	74,824
Corozal....	22,324	19,172	41,496	6,610	1,709	8,319	28,934	20,881	49,815
Miraflores.	14,107	21,477	35,584	274	343	617	14,381	21,820	36,201
Pedro Mig- uel.....	16,319	15,617	31,936	2,314	1,655	3,969	18,633	17,272	35,905
Paraiso....	6,321	6,664	12,985	2,962	2,362	5,324	9,283	9,026	18,309
Culebra....	14,869	18,764	33,633	4,859	5,425	10,284	19,728	24,189	43,917
Empire....	16,183	22,982	39,165	7,706	4,963	12,669	23,889	27,945	51,834
Las Cas- cadas....	4,406	4,721	9,127	3,745	3,254	6,999	8,151	7,975	16,126
Bas Obis- po.....	5,968	9,251	15,219	2,451	3,370	5,821	8,419	12,621	21,040
Gorgona..	10,402	9,903	20,305	3,224	2,955	6,179	13,626	12,858	26,484
Frijoles....	45	272	317	.....	20	20	45	292	337
Gatun....	22,248	34,540	56,788	5,070	5,697	10,767	27,318	40,237	67,555
Cristobal.	14,063	19,481	33,544	5,958	3,323	9,281	20,021	22,804	42,825
P o r t o Bello....	4,794	8,141	12,935	1,096	1,628	2,724	5,890	9,769	15,659
Toro Point	3,804	6,179	9,983	658	533	1,191	4,462	6,712	11,174
Margarita Point....	1,131	3,927	5,058	1	.....	1	1,132	3,927	5,059
Total.	199,222	276,401	475,623	52,704	43,058	95,762	251,926	319,459	571,385

AVERAGE NUMBER OF EMPLOYEES CONSTANTLY SICK IN HOSPITALS, SICK CAMPS, AND QUARTERS.

Hospitals.	White.	Colored.	Total.
Ancon Hospital.....	235.68	438.69	674.37
Colon Hospital.....	70.26	58.45	128.71
Palo Seco Leper Asylum.....	.08	.25	.33
Taboga Sanitarium.....	30.41	.....	30.41
Total.....	336.43	497.39	833.82

	Sick camps.			Sick in quarters.		
	White.	Colored.	Total.	White.	Colored.	Total.
Naos Island.....	.....	.....	.....	0.26	1.15	1.41
Ancon.....	.....	.....	.....	4.11	4.04	8.15
Balboa.....	.....	.....	.....	2.81	.01	2.82
Corozal.....	.....	.....	.....	2.61	.01	2.62
Miraflores.....	.....	.....	.....	.19	.12	.31
Pedro Miguel.....	.....	.....	.....	1.13	.12	1.25
Paraiso.....	.....	.....	.....	.99	.....	.99
Culebra.....	1.11	1.72	2.83	2.30	2.53	4.83
Empire.....	.....	.....	.....	6.74	1.15	7.89
Las Cascadas.....	.....	.....	.....	1.20	.18	1.38
Bas Obispo.....	.55	3.53	4.08	.44	.47	.91
Gorgona.....	.....	.....	.....	5.63	4.87	10.50
Frijoles.....	.....	.....	.....	.....	.06	.06
Gatun.....	.....	.....	.....	2.95	1.56	4.51
Cristobal.....	.....	.....	.....	6.41	2.24	8.65
Porto Bello.....	1.47	4.52	5.99	.42	.....	.42
Toro Point.....	.41	.44	.85	.14	.02	.16
Total.....	3.54	10.21	13.75	38.33	18.53	56.86

AVERAGE NUMBER OF EMPLOYEES CONSTANTLY SICK.

	White.	Colored.	Total.
Hospitals.....	336.43	497.39	833.82
Sick camps.....	3.54	10.21	13.75
Sick in quarters.....	38.33	18.53	56.86
Total.....	378.30	526.13	904.43

AVERAGE NUMBER OF EMPLOYEES CONSTANTLY SICK PER 1,000.

	White.	Colored.	Total.
Hospitals.....	28.17	11.12	14.72
Sick camps.....	.30	.23	.24
Sick in quarters.....	3.21	.41	1.01
Total.....	31.68	11.76	15.97

AVERAGE NUMBER OF DAYS' TREATMENT PER EMPLOYEE IN HOSPITALS, SICK CAMPS, AND QUARTERS.

Hospitals.	White.	Colored.	Total.
Ancon Hospital.....	13.08	15.76	14.71
Colon Hospital.....	12.70	17.91	14.63
Palo Seco Leper Asylum.....	31.00	92.00	46.00
Taboga Sanitarium.....	6.21	.....	6.21
Total.....	11.82	16.00	14.00

	Sick camps.			Quarters.		
	White.	Colored.	Total.	White.	Colored.	Total.
Naos Island.....	.....	.....	.....	2.26	2.13	2.15
Ancon.....	.....	.....	.....	2.46	5.14	3.31
Balboa.....	.....	.....	.....	2.36	1.00	2.33
Corozal.....	.....	.....	.....	1.78	1.00	1.78
Miraflores.....	.....	.....	.....	1.61	1.35	1.50
Pedro Miguel.....	.....	.....	.....	1.95	6.00	2.08
Paraiso.....	.....	.....	.....	2.40	.....	2.40
Culebra.....	3.39	3.34	3.36	2.46	2.88	2.66
Empire.....	.....	.....	.....	2.17	2.35	2.19
Las Cascadas.....	.....	.....	.....	2.00	3.00	2.10
Bas Obispo.....	8.08	12.88	11.92	1.98	2.29	2.13
Gorgona.....	.....	.....	.....	2.35	2.74	2.51
Frijoles.....	.....	.....	.....	.....	2.10	2.10
Gatun.....	.....	.....	.....	1.83	2.35	1.98
Cristobal.....	.....	.....	.....	2.20	3.69	2.45
Porto Bello.....	3.89	4.07	4.03	1.90	.....	1.90
Toro Point.....	1.37	1.32	1.34	1.34	2.00	1.39
Total.....	3.30	4.57	4.16	2.17	3.00	2.38

SUBSISTENCE AND OPERATING EXPENSES.

	Hospitals.	Sick camps.	Total.
<i>Subsistence expenses.</i>			
Number of days' rations issued to patients...	546,249	5,021	551,270
Cost of rations issued to patients.....	\$135,207.69	\$1,210.81	\$136,418.50
Cost of subsistence per patient per day.....	\$0.247	\$0.241	\$0.247
<i>Operating expenses.</i>			
Number of days' relief furnished patients.....	546,249	5,021	551,270
Cost of operation.....	\$699,500.35	\$3,101.49	\$702,601.84
Cost per capita per day.....	\$1.28	\$0.62	\$1.27
Cost of operation, with amount received from outside patients, etc., deducted.....	\$489,513.39	\$3,080.39	\$492,593.78
Cost per capita per day, with above deduction.....	\$0.90	\$0.61	\$0.89
Cost of dispensaries.....	\$124,124.19	.....	.....

OUTSIDE PATIENTS TREATED IN HOSPITALS, AND AMOUNTS
COLLECTED FOR THEIR TREATMENT.

	Number of cases treated.	Number of days' relief.	Amount.
Patients for whom the Republic of Panama pays 75 cents per day.....	2,717	75,957	\$56,967.75
Patients for whom the Canal Zone government pays 30 cents per day.....	216	5,769	1,730.70
Patients paying 30 cents per day for themselves.....	3,681	37,290	11,187.00
Patients from the Republic of Panama paying other prices.....	2,242	21,680	64,739.37
Patients from the Canal Zone paying other prices...	5,404	37,473	42,797.46
Patients from the Canal Zone not paying.....	2,841	55,013	.....
Patients from the Republic of Panama not paying..	590	6,434	.....
Total.....	17,691	239,616	177,422.28

NOTE.—Patients carried from one month to another are considered as separate cases in above table.

SURGICAL OPERATIONS PERFORMED IN HOSPITALS.

	Number.	Died.
Amputations:		
Shoulder.....	2	.....
Arm.....	6	.....
Forearm.....	4	.....
Thigh.....	8	.....
Leg.....	23	2
Foot.....	5	.....
Digits, multiple.....	39	.....
Thigh, double.....	2	1
Leg, double.....	3	1
Arm and leg.....	1	.....
Operations on bones:		
Craniectomy—		
Decompressive.....	15	4
Exploratory.....	3	.....
Laminectomy.....	7	4
Ostectomy.....	22	.....
Excision of maxilla.....	1	.....
Resection of ankle.....	1	.....
Wiring of fractures—		
Simple.....	67	.....
Compound.....	44	2
Adenectomy:		
Cervical.....	20	1
Axillary.....	15	.....
Inguinal—		
Single.....	493	.....
Double.....	108	.....
Femoral.....	29	.....
Herniotomy:		
Inguinal—		
Single.....	222	.....
Double.....	111	1
Femoral.....	5	.....
Ventral.....	29	.....
Combined (any two of the above).....	9	.....
Strangulated.....	7	3

SURGICAL OPERATIONS PERFORMED IN HOSPITALS—Continued.

	Number.	Died.
Genito-urinary tract:		
Nephrotomy.....	4	.....
Nephrectomy.....	6	.....
Nephropexy.....	2	.....
Perinephritic abscess, drainage of.....	1	.....
Ureterotomy.....	1	.....
Cystotomy.....	7	.....
Urethrotomy—		
Internal.....	55	.....
External.....	46	1
Prostatectomy.....	1	.....
Varicocele, radical cure.....	14	.....
Hydrocele—		
Single, radical cure.....	73	.....
Double, radical cure.....	14	.....
Orchidectomy.....	13	.....
Epididymotomy.....	122	.....
Amputation of scrotum.....	34	.....
Amputation of penis and scrotum.....	3	.....
Curetage uteri.....	138	2
Perineoplasty.....	53	.....
Trachelorrhaphy.....	38	.....
Vaginal sections.....	6	.....
Vaginal punctures.....	3	.....
Obstetrical:		
Cesarean section, abdominal.....	17	4
High forceps.....	6	.....
Low forceps.....	14	.....
Version.....	2	.....
Perineorrhaphy.....	93	.....
Thorax:		
Thoracotomy.....	9	3
Thoracoplasty.....	4	.....
Pneumothoracotomy.....	1	.....
Excision of breast.....	1	.....
Excision of breast and axilla.....	1	.....
Gunshot wound of chest, operation for.....	1	.....
Rectum:		
Hemorrhoids, radical cure.....	172	.....
Fistula in anus, excision of.....	15	.....
Prolapsus rectum, radical excision.....	1	.....
General:		
Thyroidectomy.....	8	.....
Aneurismorrhaphy.....	1	.....
Varicose veins, excision of.....	33	.....
Tenorrhaphy.....	10	.....
Excision of surface neoplasms.....	67	.....
Gunshot wound of soft parts, operation for.....	3	.....
Extensive injuries to soft parts, operation for.....	1	1
Plastic operation for congenital defect.....	1	.....
Plastic operation for severe injuries.....	37	.....
Plastic operation for effects of disease.....	25	.....
Skin graft.....	41	.....
Laparotomy:		
For general peritonitis.....	6	4
For tuberculous peritonitis.....	8	3
For intestinal obstruction.....	6	1
Exploratory.....	16	3
Gastrotomy.....	1	.....
Gastro-enterostomy.....	14	.....
Entero-enterostomy.....	3	.....
Enterectomy.....	3	.....
Enterorrhaphy.....	2	.....
Appendectomy.....	340	.....
Appendectomy with local peritonitis.....	24	.....

SURGICAL OPERATIONS PERFORMED IN HOSPITALS—Continued.

	Number.	Died.
Laparotomy—Continued.		
Appendectomy with general peritonitis.....	11	7
Colostomy.....	2	
Sigmoidopexy.....	1	
Resection of rectum.....	2	
Cholecystotomy.....	3	
Cholecystostomy.....	19	1
Cholecystectomy.....	3	
Choledochotomy.....	1	
Abscess of liver—		
Laparo-hepatotomy for.....	14	3
Thoraco-hepatotomy for.....	4	1
Splenectomy.....	3	1
Pan-hysterectomy.....	15	
Supravaginal hysterectomy.....	42	1
Hysteromyomectomy.....	41	1
Myomectomy.....	11	
Salpingectomy—		
Single.....	17	
Double.....	22	
Salpingo-oophorectomy.....	22	
Ovarian cystectomy.....	9	1
Oophorectomy.....	2	
Suspensio-uteri.....	70	1
Plastic operation for chronic pelvic peritonitis.....	120	
For ectopic gestation.....	6	1
For trauma:		
General peritonitis.....	2	2
Hemato-peritoneum.....	3	
Rupture of liver.....	4	1
Gunshot wound of abdomen.....	1	
Stab wound of abdomen.....	3	1
Major operations, various other.....	164	1
Minor operations, various.....	3,319	3
Total.....	6,858	67

OPERATIONS AND WORK PERFORMED IN EYE, EAR, NOSE, AND THROAT CLINICS.

	Number.	Died.
Operations:		
Abscess, parotid.....	2	
Adenectomy.....	266	
Advancement of external rectus.....	1	
Bowman's dilatation of lacrymal duct.....	1	
Capsulectomy.....	7	
Cataract, needling.....	2	
Cleft palate.....	1	
Conjunctiva, papilloma.....	1	
Conjunctivitis, follicular, grattage.....	1	
Corneal ulcer (cauterization).....	3	
Cysts.....	4	
Cyst, sebaceous, excision.....	3	
Enucleation.....	17	
Evisceration.....	8	
Excision of chalazion.....	24	
Expression for eyelid.....	2	
Expression for follicular conjunctivitis.....	3	
Expression for trachoma.....	15	

OPERATIONS AND WORK PERFORMED IN EYE, EAR, NOSE, AND
THROAT CLINICS—Continued.

	Number.	Died.
Operations—Continued.		
Extraction of cataract.....	30	.....
Holsrath-Kuhnt operation.....	1	.....
Incision of chalazion.....	6	.....
Iridectomy.....	49	.....
Iridotomy.....	2	.....
Killian's operation—frontal sinus.....	2	.....
Lacrymal duct probed.....	1	.....
Mastoidectomy.....	22	.....
Mastoidotomy—		
Simple.....	1	.....
Radical.....	3	.....
Paracentesis of cornea.....	5	.....
Plastic on ear.....	3	.....
Plastic on eyeball.....	7	.....
Plastic on eyelid.....	6	.....
Plastic, face.....	5	.....
Plastic on lip.....	1	.....
Plastic on mouth.....	1	.....
Plastic on nose.....	30	.....
Pterygium—		
Ablation.....	6	.....
Transplantation.....	113	.....
Reconstruction of nose.....	1	.....
Removal of aural polyp.....	2	.....
Removal of nasal polyp.....	5	.....
Removal of nasal spur.....	7	.....
Resection—		
Inferior rectus.....	2	.....
Internal rectus.....	1	.....
External rectus.....	4	.....
Removal of stone from sublingual duct.....	1	.....
Sclerotomy, posterior.....	3	.....
Septal spurs.....	2	.....
Sequestrum, removal, lachrymal.....	1	.....
Sinusotomy—		
Maxillary.....	20	.....
Nasal.....	3	.....
Submucous resection of nasal septum.....	344	.....
Synechia anterior, needling.....	1	.....
Tarsal tumors.....	3	.....
Tattoo, cornea.....	1	.....
Tenotomy.....	6	.....
Tonsillectomy.....	520	.....
Tracheotomy.....	5	.....
Tucking, internal rectus.....	2	.....
Tucking, external rectus.....	1	.....
Turbinectomy.....	129	.....
Various minor operations.....	1,075	.....
Total.....	2,794	.....
Refractions.....	2,785	.....
Outside cases treated.....	17,080	.....
Grand total.....	22,659	.....

CONSOLIDATED WARD LABORATORY REPORT OF ALL HOSPITALS.

Blood examinations	14,447
Estivoautumnal.....	3,218
Tertian.....	934
Mixed tertian and estivoautumnal.....	40
Quartan.....	79
Differential blood counts.....	943
Leucocyte counts.....	2,101
Red blood counts.....	132
White blood counts.....	193
Hemoglobin estimations.....	1,040
Filaria.....	7
Relapsing fever.....	2
Stool examinations	14,501
Ascaris lumbricoides.....	850
Uncinaria ova.....	2,304
Uncinaria worms.....	10
Tricocephalus dispar.....	2,117
Strongyloides intestinalis.....	701
Tenia.....	2
Tenia saginata.....	8
Ameba.....	78
Mucus.....	25
Entamoeba.....	83
Ciliated monads.....	223
Bilharzia.....	5
Pus and blood.....	2,336
Balantidium coli.....	17
Tubercle bacilli.....	5
Entamoeba, tetragena.....	20
Oxyuris vermicularis.....	2
Entamoeba, histolytica.....	30
Entamoeba coli.....	10
Guaiaac and turpentine tests for occult blood.....	28
Bismuth crystals.....	98
Treponema pertenuis.....	1
Cercomonas intestinalis.....	54
Urine examinations	32,580
Albumen.....	8,687
Albumen and casts.....	5,266
Sugar.....	332
Pus and blood.....	4,814
Gonococci.....	4
Indican.....	7
Epithelium.....	1,502
Bile.....	66
Microscopical examinations.....	512
Trichomonas vaginalis.....	21
Hemin crystals.....	22
Guaiaac and turpentine tests for blood.....	156
Red blood cells.....	44
Pus and epithelium.....	376
Ciliated monads.....	22
Sputum examinations	1,995
Tubercle bacilli.....	419
Miscellaneous:	
Examinations of pleural effusions.....	20
Examinations of various smears and discharges.....	295
Examinations of spinal fluid.....	16
Examinations of vaginal and urethral discharges.....	141
Gastric analyses.....	55

ANCON HOSPITAL.

Class.	Remain- ing Jan. 1.		Admitted.		Died.		Discharged.		Trans- ferred.		Remain- ing Dec. 31.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Isthmian Canal Commission employees.....	195	389	6,282	8,998	27	170	5,129	8,806	1,142	71	179	340
Panama R. R. employees.....	16	50	271	1,111	3	34	209	1,069	67	7	8	51
Pay patients.....	83	59	2,996	1,373	43	144	2,758	1,189	162	30	116	69
Charity patients..	6	15	314	480	12	98	289	357	3	23	16	17
Insane patients...	24	282	37	198	4	51	25	132	3	46	29	251
Total.....	324	795	9,900	12,160	89	497	8,410	11,553	1,377	177	348	728

	White.	Colored.	Total.
Average number of days' treatment per employee for the year.....	13.08	15.76	14.71
Average number of employees constantly sick during the year.....	235.68	438.09	674.37
Number of days' relief furnished patients.....			423,251
Cost of subsistence per patient per day.....			\$0.217

NATIONALITY.

Class.	Num- ber treated.	Americans.		Other nations.	
		White.	Colored.	White.	Colored.
Isthmian Canal Commission employ- ees.....	15,864	3,100	33	3,206	9,525
Panama R. R. employees.....	1,448	163	1	91	1,193
Pay patients.....	4,511	1,931	3	1,048	1,529
Charity patients.....	815	214	1	78	522
Insane patients.....	541	16	.....	36	489
Total.....	23,179	5,424	38	4,459	13,258

OPERATIONS.

(See report of all surgical operations.)

LABORATORY REPORT.

(See consolidated ward laboratory report.)

COLON HOSPITAL.

Class.	Remain- ing Jan. 1.		Admitted.		Died.		Discharged.		Trans- ferred.		Remain- ing Dec. 31.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Isthmian Canal Com- mission employees..	94	45	1,564	637	7	25	1,349	634	297	12	5	11
Panama R. R. em- ployees.....	17	33	350	498	3	26	277	487	86	7	1	11
Private pay.....	29	47	1,016	1,132	7	71	1,013	1,096	21	10	4	2
Municipal pay.....	.....	5	16	129	3	19	13	105	.....	10	.....	.....
Zone charity.....	10	26	156	357	6	37	157	328	3	16	.....	2
Total.....	150	156	3,102	2,753	26	178	2,809	2,650	407	55	10	26

	White.	Colored.	Total.
Average number of days' treatment per employee for the year.....	12.70	17.91	14.63
Average number of employees constantly sick during the year.....	70.26	58.45	128.71
Number of days' relief furnished patients.....	.....	.....	85,941
Cost of subsistence per patient per day.....	.....	.....	\$0.282

NATIONALITY.

Class.	Number treated.	Americans.		Other nations.	
		White.	Colored.	White.	Colored.
Isthmian Canal Commission em- ployees.....	2,340	1,257	.....	370	713
Panama R. R. employees.....	898	236	.....	96	566
Private pay.....	2,224	645	.....	366	1,213
Municipal pay.....	150	.....	.....	17	133
Zone charity.....	549	96	.....	50	403
Total.....	6,161	2,234	.....	899	3,028

OPERATIONS.

(See report of all surgical operations.)

LABORATORY REPORT.

(See consolidated ward laboratory report.)

CULEBRA HOSPITAL.

Class.	Re-main-ing Jan. 1.		Ad-mit-ted.		Died.		Dis-charged.		Trans-ferred.		Re-main-ing Dec. 31.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Nonemployees.....		3	6	23	.....	.....	6	17	.....	9	.....	.....

Number of days' relief furnished patients..... 363
 Cost of subsistence per patient per day..... \$0.267

NATIONALITY.

Class.	Number treated.	Americans.		Other nations.	
		White.	Colored.	White.	Colored.
Nonemployees.....	32	1	1	5	25

OPERATIONS.

(See report of all surgical operations.)

LABORATORY REPORT.

(See consolidated ward laboratory report.)

PALO SECO LEPER ASYLUM.

Class.	Remaining Jan. 1.		Ad-mit-ted.		Died.		Dis-charged.		Trans-ferred.		Re-main-ing Dec. 31.	
	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.	White.	Colored.
Employees.....	.....	.....	1	1	.....	.....	1	1	.....	.....	.....	.....
Pay patients.....	2	28	1	8	5	1	3	.....	2	.....	2	28
Charity patients.....	1	17	1	3	4	.....	2	.....	1	.....	2	13
Total.....	3	45	3	12	9	1	6	1	1	4	4	41

	White.	Colored.	Total.
Average number of days' treatment per employee for the year.....	31.00	92.00	46.00
Average number of employees constantly sick during the year.....	.08	.25	.33
Number of days' relief furnished patients.....	.....	.....	17,294
Cost of subsistence per patient per day.....	.....	.....	\$0.278

PALO SECO LEPER ASYLUM—Continued.

NATIONALITY.

Class.	Number treated.	Americans.		Other nations.	
		White.	Colored.	White.	Colored.
Employees.....	2	1			1
Pay patients.....	39			2	37
Charity patients.....	22			2	20
Total.....	63	1		4	58

TABOGA SANITARIUM.

Class.	Remain- ing Jan. 1.	Ad- mitted.	Died.	Dis- charged.	Trans- ferred.	Remain- ing Dec. 31.
Employees.....	34	1,776	.....	1,767	21	22
Families of employees and others.....	9	1,258	.....	1,257	3	7
Total.....	43	3,034	.....	3,024	24	29

Average number of days' treatment per employee for the year..... 6.21

Average number of employees constantly sick during the year..... 30.41

Number of days' relief furnished patients..... 19,400

Cost of subsistence per patient per day..... \$0.676

NATIONALITY.

Class.	Number treated.	Americans.	Other nations.
Employees.....	1,810	1,495	315
Families of employees and others.....	1,267	1,209	58
Total.....	3,077	2,704	373

NOTE.—No colored patients treated at Taboga Sanitarium.

SANTO TOMAS HOSPITAL.

Class.	Remain- ing Jan. 1.	Ad- mitted.	Died.	Dis- charged.	Trans- ferred.	Remain- ing Dec. 31.
Pay cases.....	39	1,015	37	1,001		16
Charity cases.....	223	6,890	396	6,381		336
Total.....	262	7,905	433	7,382		352

Average number of days' treatment per patient..... 14.73

Average number of patients constantly sick..... 315.28

Number of days' relief furnished patients..... 115,079

Cost of subsistence per patient per day..... \$0.245

SANTO TOMAS HOSPITAL—Continued.

NATIONALITY.

Class.	Number treated.	Americans.		Other nations.	
		White.	Colored.	White.	Colored.
Pay cases.....	1,054	.....	.....	375	679
Charity cases.....	7,113	.....	.....	845	6,268
Total.....	8,167	.....	.....	1,220	6,947

OPERATIONS.

	Number.	Died.
Major.....	1,162	33
Minor.....	271	.....
Total.....	1,433	33

DISPENSARY

Class.	White.	Colored.	Total.
Natives.....	640	3,683	4,323
Foreigners.....	217	1,137	1,354
Total.....	857	4,820	5,677

BOARD OF HEALTH LABORATORY.

Bacteriological examinations of—

Water.....	2
Cultures, various.....	6
Fluids and exudates.....	1
Fluids from tumor.....	1
Blood cultures.....	317
Throat cultures (diphtheria suspects).....	569
Cultures from autopsies.....	76
Cultures from eye.....	5
Stools.....	280
Urine.....	626
Sputum.....	6
Pus.....	5
Hydrocele fluid.....	1
Knee-joint fluid.....	14
Spinal fluid.....	44
Various smears and specimens.....	76
Pleural fluid.....	3
Scrapings.....	1
Fluid from joint.....	1
Fluid from chest.....	3
Animal.....	2
Aspirated fluid.....	1
Abdominal fluid.....	1

Bacteriological examinations of—Continued.

Peritoneal fluid.....	1
Fluid from pleural cavity.....	6
Fluid from gall bladder.....	5
Epithelial flakes.....	1
Determinations of—	
Germicidal test—	
Proprietary disinfectant.....	1
Phenol oil.....	1
Examinations of—	
Leper suspects.....	29
Animals.....	42
Chemical examinations of—	
Preparations made.....	2
Brackish water.....	14
Kidney stone.....	1
Gall stones.....	2
Kerosene.....	1
Red lead.....	1
Soap.....	1
Substance from valve stem.....	1
Gear grease.....	1
Stomach contents.....	5
Organs and contents (post-mortem) for poisons.....	1
Urine.....	32
Crude carbolic acid.....	1
Various liquids, fluids, etc.....	41
Various metals.....	2
Sugar cane.....	3
Oil, vaseline.....	2
Coke.....	1
Sugar, brown.....	2
Castor oil.....	2
Fire clay.....	1
Liver and urine for arsenic.....	1
Vomit.....	1
Ether.....	3
“Pabst Extract”.....	1
Whisky.....	1
Phenol oil.....	1
Test meal.....	1
Stool.....	2
Water for detection of chlorin contents.....	78
“Ambrew”.....	1
Agglutination reactions.....	173
Autopsies.....	567
Autopsies of cows.....	3
Bodies embalmed.....	73
Hydrophobia, preventative treatment.....	1
Medico-legal post-mortems.....	14
Sections of tissue prepared—	
Frozen.....	71
Paraffin.....	6, 422
Surgical pathological tissue and neoplasms reported.....	273
Vaccinations, antipest.....	7
Vaccination for plague.....	3
Vaccine inoculations, anti-typhoid.....	13
Vaccine treatment, autogenous—	
Prepared.....	55
Administered.....	1
Wasserman reactions.....	3, 007
Widal reactions.....	29

ISSUES OF QUININE.

Month.	Kilograms.	Pounds avoir- dupois.
January.....	23.33	51.43
February.....	35.66	78.62
March.....	52.00	114.64
April.....	26.33	57.95
May.....	15.43	34.02
June.....	46.33	102.14
July.....	33.59	74.05
August.....	38.33	84.50
September.....	40.73	89.80
October.....	36.50	80.46
November.....	17.00	37.48
December.....	39.166	86.35
Total.....	404.396	891.44
Average per month.....	33.699	74.29

SANITATION—CITY OF PANAMA.

Anopheles brigade:	
Linear feet of ditches cleaned.....	867,548
Linear feet of ditches dug.....	2,982
Square feet of weeds and grass cut and removed.....	3,733,600
Wells filled.....	1
Cubic yards of earth used in filling cesspools, wells, and holes.....	5,519
Loads of grass removed and burned.....	1,924
Disinfection brigade:	
Houses disinfected for diphtheria.....	35
Houses disinfected for tuberculosis.....	2
Houses disinfected for chickenpox.....	14
Houses disinfected for cerebrospinal meningitis.....	5
Houses disinfected for scarlet fever.....	74
Houses disinfected for measles.....	1
Houses disinfected for smallpox.....	1
Houses disinfected for typhoid fever.....	11
Number of cubic feet disinfected.....	1,407,715
Number of rooms disinfected.....	329
Material used:	
Crude oil..... gallons..	756
Larvacide.....	4,310
Destruction of rats:	
Number of rats caught and killed.....	1,442
Average number of rat traps in use.....	98
Inspection of houses and yards:	
Houses and yards inspected.....	826
Persons notified to keep premises in good condition.....	194
Warning notices complied with.....	189
Number of letters to alcalde requesting enforcement of sanitary rules and regulations.....	63
Number of old buildings condemned and demolished.....	85
Number of yards cleaned.....	3,577
Loads of refuse removed from the city.....	5,782
New buildings:	
Number of plans submitted to health officer and approved.....	282
Number of permits granted for repairs to old buildings.....	277
Garbage collection: Number of loads of garbage removed to dump and burned.....	10,894

SANITATION—COLON, CRISTOBAL, MOUNT HOPE, AND TORO POINT.

Water and sewers:	
Number of connections made during the year.....	100
Total number of connections made to date.....	1,123
Number of outstanding permits.....	539
Number of houses in which extensions were made.....	34
Houses:	
Plans approved.....	121
Permits to repair issued.....	563
Permits to occupy issued.....	91
Temporary permits to occupy issued.....	28
Sanitation of Colon:	
Number of loads of yard garbage removed.....	5,161
Average number of cans of garbage removed daily.....	2,141
Number of acres of vegetation removed.....	93
Number of acres of streets cleaned.....	7,393
Number of private properties cleaned.....	634
Number of square yards of pools oiled.....	173,370
Number of mosquito-breeding places found.....	1,202
Number of water receptacles treated.....	330,850
Number of linear feet of ditches constructed.....	2,000
Number of linear feet of ditches maintained.....	92,300
Notice to abate nuisances served.....	2,960
Number of nuisances abated.....	2,342
Number of buildings inspected.....	42,271
Number of rats killed.....	506
Number of square yards of alleys cleaned.....	3,795,132
Number of square yards of streets sprinkled.....	1,292,000
Number of fly-breeding places found.....	1,341
Sanitation of Cristobal:	
Number of square yards of pools oiled.....	32,200
Number of water receptacles treated.....	51,600
Number of mosquito-breeding places found.....	193
Number of linear feet of ditches constructed.....	16,119
Number of mosquitoes killed in barracks.....	23,156
Number of fly-breeding places found.....	179
Sanitation of Mount Hope:	
Number of square yards of pools oiled.....	1,310,792
Number of water receptacles treated.....	257,400
Number of linear feet of ditches maintained.....	260,586
Number of crab holes worked.....	15,000
Number of mosquito-breeding places found.....	1,705
Number of linear feet of ditches constructed.....	58,685
Number of square yards of vegetation removed.....	16,119
Number of mosquitoes killed in outfit cars.....	19,661
Sanitation of Toro Point:	
Number of square yards of pools oiled.....	69,981
Number of water receptacles treated.....	14,356
Number of mosquito-breeding places found.....	42
Number of linear feet of ditches constructed.....	4,358
Number of linear feet of ditches maintained.....	153,453
Number of crab holes worked.....	2,000
Number of doses of quinine tonic distributed.....	50,830
Number of adult mosquitoes killed.....	18,872

SANITATION—CANAL ZONE.

Work requests on quartermaster's department:	
Grass cutting.....	557
Screen repairing.....	277
Miscellaneous.....	486
Work requests on engineering department.....	561
Work requests on other departments.....	59
Notice served for abatement of nuisances.....	1,873
Arrests for violation of sanitary regulations.....	251
Convictions.....	238
Building permits approved.....	177
Inspections of closets.....	76,655

Inspections of stores.....	5,085
Inspections of restaurants.....	2,364
Inspections of shops.....	2,319
Garbage cans emptied.....	2,301,407
Closets disinfected.....	187,254
Houses disinfected.....	87
Houses fumigated.....	1
Rat traps used daily.....	347
Water and sewer connections made.....	55
Number of adult anopheles destroyed at houses.....	403,117
Number of adult culices destroyed at houses.....	364,174
Number of containers found with stegomyia larvae.....	1,103
Material used:	
Larvacide.....	gallons.. 113,118
Crude oil.....	do..... 607,973
Rats destroyed.....	10,617

QUARANTINE SERVICE.

PORTS OF PANAMA-ANCON AND COLON-CRISTOBAL.

Number of vessels inspected and passed.....	1,342
Number of vessels detained in quarantine.....	118
Number of vessels fumigated on arrival.....	99
Number of vessels fumigated prior to departure.....	42
Number of pieces of baggage handled and stored.....	9,520
Number of crew inspected.....	132,558
Number of passengers inspected.....	87,961
Total number of persons inspected.....	220,519
Number of persons vaccinated at ports of arrival because of compulsory vaccination law.....	11,939
Number of persons vaccinated at ports of departure or en route because of compulsory vaccination law.....	13,636
Total number of persons vaccinated.....	25,575
Number of persons held in quarantine at the detention stations to complete period of incubation of yellow fever or plague.....	5,345
Number of persons held in quarantine on board vessels to complete period of incubation of yellow fever or plague.....	17,183
Total number of persons held in quarantine.....	22,530
Number of persons landed from foreign ports:	
Cabin.....	23,595
Steerage.....	26,710
	50,305
Number of persons embarked for foreign ports:	
Cabin.....	26,523
Steerage.....	28,430
	54,953
Apparent decrease for the year from foreign ports:	
Cabin.....	2,928
Steerage.....	1,720
	4,648
Number of persons arriving from coast towns on small craft.....	36,003
Number of persons embarked for coast towns on small craft.....	32,393
Apparent increase for the year from coast towns.....	3,610
Total number of persons landed.....	86,308
Total number of persons embarked.....	87,346
Excess over number landed.....	1,038
Plus number for Pacific ports.....	3,295
Total apparent decrease for the year.....	4,333
Number of immigrants recommended for rejection.....	59
Number of certificates issued to outgoing passengers.....	454
Number of persons refused certificates because of trachoma.....	69
Number of bills of health viséed.....	744

BOCAS DEL TORO.

Number of vessels inspected and passed.....	379
Number of crew inspected and passed.....	23,556
Number of passengers inspected and passed.....	10,336
Number of passengers, in transit, inspected and passed.....	7,314
Number of persons held to complete period of incubation of yellow fever..	97

PERSONNEL REPORT.

[Average number of employees at work during the year.]

Chief sanitary office.....	33
Property division.....	9
Quarantine service.....	40
Health office, Panama.....	83
Health office, Colon.....	127
Ancon Hospital.....	548
Colon Hospital.....	166
Santo Tomas Hospital.....	6
Taboga Sanitarium.....	21
Palo Seco Leper Asylum.....	14
Zone sanitation.....	224
Hospital farm.....	22
Dispensaries:	
Ancon.....	5
Balboa.....	4
Bas Obispo.....	4
Corozal.....	5
Cristobal.....	6
Culebra.....	7
Empire.....	6
Frijoles.....	1
Gatun.....	9
Gorgona.....	6
Las Cascadas.....	4
Margarita Point.....	1
Miraflores.....	3
Naos Island.....	2
Paraiso.....	4
Pedro Miguel.....	4
Porto Bello.....	4
Toro Point.....	3
Total.....	1,371

HOSPITAL CASES OF MALARIA AMONG EMPLOYEES.

Month.	Discharged.		Died.		Total cases.	Annual average death rate per 1,000.	Annual average number of cases per 1,000.	Number of employees.
	White.	Colored.	White.	Colored.				
January.....	215	281	1	2	499	0.69	115	52,142
February.....	235	355	1	...	591	.22	128	55,333
March.....	185	248	...	...	433	.....	92	56,258
April.....	82	152	...	...	234	.....	47	59,486
May.....	88	88	1	...	177	.20	36	59,771
June.....	87	149	1	...	237	.20	49	58,590
July.....	91	239	...	1	331	.21	69	57,960
August.....	109	255	1	2	367	.62	75	58,465
September.....	79	216	1	...	296	.20	60	59,192
October.....	114	295	1	...	410	.21	84	58,344
November.....	85	285	1	2	373	.67	83	53,942
December.....	98	236	1	1	336	.48	80	50,357
Total.....	1,468	2,799	9	8	4,284	.30	76	56,654

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